

**PP-7**

**Synthesis, Characterisation and Antimicrobial Potential of Benzimidazole**

**Derivative Containing N-Methyl Piperazine Moiety**

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New therapeutic options are required due to emerging infectious diseases and increasing number of multidrug resistant microbial pathogens. Benzimidazole and piperazine heterocyclic nucleus are active pharmacophores. Hence, this paper highlights the synthesis of new benzimidazolyl derivatives namely 2-phenyl-4'- (N-methyl piperazino)-aryl/succinimido substituted benzimidazoles. Derivatives are characterized by elemental analysis along with IR, <sup>1</sup>HNMR and Mass spectral analysis. The synthesized compounds are evaluated for their antibacterial and antifungal activities. These derivatives show medium to high efficacy against selected pathogens.

**Keywords:** Benzimidazole, Piperazine, Antibacterial activity, Antifungal activity